

What is claimed is:

1. An ND filter comprising:

a substrate formed of a plastic sheet having a glass transition temperature of at least 120°C, and

5 a deposit film formed on a surface of the substrate.

2. An ND filter according to claim 1, wherein said plastic sheet has at least 90% of visible light transmittance and 0.5% or less of turbidity.

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3. An ND filter according to claim 2, wherein said plastic sheet is formed of a material selected from the group consisting of polycarbonate resin and a norbornene resin.

15 4. An ND filter according to claim 3, wherein said deposit film includes a Chromel layer, a silicon dioxide layer, and magnesium fluoride layer.

5. An ND filter according to claim 1, wherein said Chromel layer  
20 and silicon dioxide layer are alternately deposited, and the magnesium fluoride layer is deposited on a top of the deposit film.

6. A method for producing an ND filter, comprising the steps of:  
25 placing a substrate formed of a plastic sheet in a vacuum chamber,

evacuating the vacuum chamber to a predetermined degree of vacuum, and

forming a deposit film on a surface of the substrate at a temperature below a glass transition temperature of the plastic sheet.

5 7. A method for producing an ND filter according to claim 6, wherein said glass transition temperature is above 120°C.

8. An aperture device comprising the ND filter according to claim 1.

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